

REMARKS

Claims 1 to 41 (as renumbered by the Examiner) are in the application. Claims 1 to 14, 17 to 19 and 22 to 26 have been allowed. Claims 15, 16, 20, 21, 28 to 36 and 38 to 41 have been amended to address the objection noted in paragraph 4 of the action. Accordingly, that objection no longer applies to those claims. That being the case, claims 15, 16, 20 and 21 dependent upon allowed claim 1 should be allowed.

Claims 27 and 37 have also been amended to more clearly distinguish the claimed hub assembly from the cited Li reference. These amendments do not raise new issues or require an additional searching effort on the part of the Examiner. Therefore, we respectfully request that they be entered and given consideration.

Applicant requests reconsideration of the rejection of claim 27 as being unpatentable over Li in view of Rockland. Claim 27 has been amended to specify that the motorized wheel hub assembly has a sealed motor section with stationary first and second end walls and a stationary side wall as well as a first shaft extending from the first end wall which is also stationary. Furthermore, the claim now specifies that the rotary second shaft extending from the second end wall is coaxial to but spaced axially from the first shaft. Claim 27 goes on to recite that the gear reduction section adjacent to the second end wall includes a plurality of nonorbiting planet gears and that the third shaft connected to the second wall is also stationary, that third shaft being coaxial to but spaced axially from the first and second shaft. Finally, claim 27 calls for a hub having an interior surface closely surrounding the motor section and planet gears and being rotatably coupled to the first and third shafts with a ring gear formed in the interior surface of the hub in

meshing engagement with the planet gears so that when the second shaft rotates at a selected speed, the hub rotates relative to the first and third shafts at a lesser speed.

It is quite clear from Applicant's claims 27 that the first, second and third shafts in Applicant's assembly are separate elements which are spaced axially from one another, i.e., in a line. It is also clear that the first and third axes as well as the motor section walls are stationary. Also, since the gear support is mounted to the stationary second wall, the planet gears are nonorbiting. As a result, the motor section and gear reduction section can be located entirely within the wheel hub and yet still obtain a high gear reduction.

In paragraph 6 of the action, the Examiner equates Li's walls 180, 190 to the first and second walls of the sealed motor section recited in Applicant's claims 27. However, this is clearly not the case because walls 180, 190 form the wheel hub in the Li motor and they surround the walls 20, 30 forming the actual motor case in that apparatus. Thus, the walls 180, 190 in Li cannot be stationary as specified by Applicant. Furthermore, at least the wall 180 is formed with air scoop slots as clearly seen in FIGS. 1 and 2 of that patent. Therefore, wall 180 cannot possibly be considered part of a sealed housing.

In view of the foregoing, we assume that the Examiner really meant Li's walls 20 and 30 as being equivalent of the first and second walls specified in claim 27. But, in either event, Li's second shaft 90 encircles the first shaft 40. Therefore, it is not spaced axially from the first shaft as now specified in claim 27. The same is true with Li's third shaft 150. Also, whereas Applicant's planet gears are specified as being nonorbiting, Li's planet gears obviously must orbit in order to turn the third shaft 150 which rotates the wheel hub 180.

We also do not see how the Rockland teaching can be combined with Li to produce the equivalent of Applicant's claimed assembly. In the first place, Rockland's Servo Wheels assembly is not really a hub motor because the motor itself is located outside the wheel hub and is intended to be mounted directly to the vehicle frame. In other words, Rockland's assembly is not supported by the hub shafts.

Also, while Rockland does teach the formation of a ring gear in the hub side wall, that is not to say that that feature can be incorporated into the Li structure without a wholesale reconstruction of the Li wheel. For example, if the ring gear 100 in Li were substituted for by a ring gear on the inside of hub 180, the resultant assemblage would not operate because Li's third shaft 150 is not fixed to rotate with the motor case wall 30, i.e., Applicant's claimed second wall. This is because in Li, the planet gears must orbit to rotate the hub 180. Thus, there can be no suggestion in either Li or Rockland to fix the third shaft 150 to the motor case wall 30. Any such suggestion can only have resulted from a hindsight application of Applicant's own disclosure.

Accordingly for the foregoing reasons, claim 27 and claims 28 to 36 dependent thereon should be allowed.

We also request reconsideration of the rejection of claim 37 as being unpatentable over Li in view of Rockland.

Claim 37 has been amended to include more or less the same limitations described above in connection with claim 27. That is, like claim 27, claim 37 specifies that the walls of the sealed motor section are stationary, that the first shaft is stationary and

that the second shaft is spaced axially from the first shaft. Finally, claim 37 calls for nonorbiting planet gears.

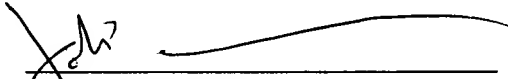
As discussed above, Li's first shaft 40 and third shaft 150 are not spaced apart axially and his planet gears must orbit relative to case wall 30 in order for that device to operate properly. Thus, claim 37 should be allowed for the same reasons as claim 27.

Claims 38 to 41 being dependent upon claim 37 should be allowed for the same reasons and because they recite additional structure not found in the prior art of record.

Accordingly, the application is now in condition for allowance.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,



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